

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

WO 98/11234

(51) International Patent Classification 6 :

C12N 15/54, 9/12, C07K 16/40, A61K  
38/45, C12Q 1/48, C12N 15/11

A2

(11) International Publication Number:

(43) International Publication Date: 19 March 1998 (19.03.98)

(21) International Application Number: PCT/US97/15923

(22) International Filing Date: 10 September 1997 (10.09.97)

(30) Priority Data: 08/712,709 12 September 1996 (12.09.96) US

(60) Parent Application or Grant

(63) Related by Continuation  
US 08/712,702 (CIP)  
Filed on 12 September 1996 (12.09.96)

(71) Applicant (for all designated States except US): INCYTE  
PHARMACEUTICALS, INC. [US/US]; 3174 Porter Drive,  
Palo Alto, CA 94304 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): AU-YOUNG, Janice  
[US/US]; 1419 Kains Avenue, Mountain View, CA 94702  
(US). GUEGLER, Karl, J. [CH/US]; 1048 Oakland Avenue,  
Menlo Park, CA 94025 (US). HAWKINS, Phillip, R.  
[US/US]; 750 N. Shoreline Boulevard #96, Mountain View,  
CA 94034 (US).

(74) Agent: BILLINGS, Lucy, J.; Incyte Pharmaceuticals, Inc., 3174  
Porter Drive, Palo Alto, CA 94304 (US).

(81) Designated States: AT, AU, BR, CA, CH, CN, DE, DK, ES,  
FI, GB, IL, JP, KR, MX, NO, NZ, RU, SE, US, ARIPO  
patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian  
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European  
patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT,  
LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI,  
CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published

Without international search report and to be republished  
upon receipt of that report.

(54) Title: HUMAN PROTEIN KINASES

```

          9      18      27      36      45      54
5' NNC ATT CTG GGA CCT GTT CGC AGG ACC GTC CGG TGT TCT GGC CCC CTG ATG TCA

          63      72      81      90      99      108
CCT TCA CGG GCC TGA CTC ACA GTC CTA AAT ATC TGA CAG CGA AGA TCG CTT GTA

          117     126     135     144     153     162
GTT CGT GCC CTC GTG AGG CTG GCA TGC AGG ATG GCA GGA CAG CCC GGC CAC ATG

          171     180     189     198     207     215
CCC CAT GGA GGG AGT TCC AAC AAC CTC TGC CAC ACC CTG GGG CCT GTG CAT CCT

          225     234     243     252     261     270
CCT GAC CCA CAG AGG CAT CCC AAC ACG CTG TCT TTT CGC TGC TCG CTG GCG GAC

          279     288     297     306     315     324
TTC CAG ATC GAA AAG AAG ATA GGC CGA GGA CAG TTC AGC GAG GTG TAC AAG GCC

          333     342     351     360     369     378
ACC TGC CTG CTG GAC AGG AAG ACA GTG GCT CTG RAG AAG GTG CAG ATC TTT GAG

          387     396     405     414     423     432
ATG ATG GAC GCC AAG GCG AAG CAG GAC TGT GTC AAG GAG ATC GGC CTC TTG AAG
M M D A K A K Q D C V K E I G L L K
```

(57) Abstract

The present invention provides novel human protein kinases (HPK) and polynucleotides which identify and encode HPK. The invention provides for genetically engineered expression vectors and host cells comprising the nucleic acid sequences encoding HPK. The invention also provides for pharmaceutical compositions comprising HPK or antagonists of HPK, and antibodies which specifically bind HPK. Additionally, the invention provides antisense molecules to HPK for treatment or prevention of diseases associated with abnormal expression of HPK.

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						